

PRINT OF DRAWINGS
AS ORIGINALLY FILED

FIG.-2A

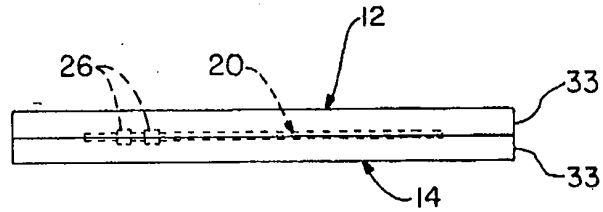


FIG.-3A

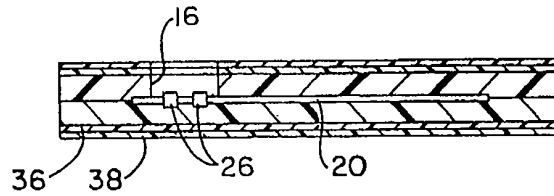


FIG.-3B

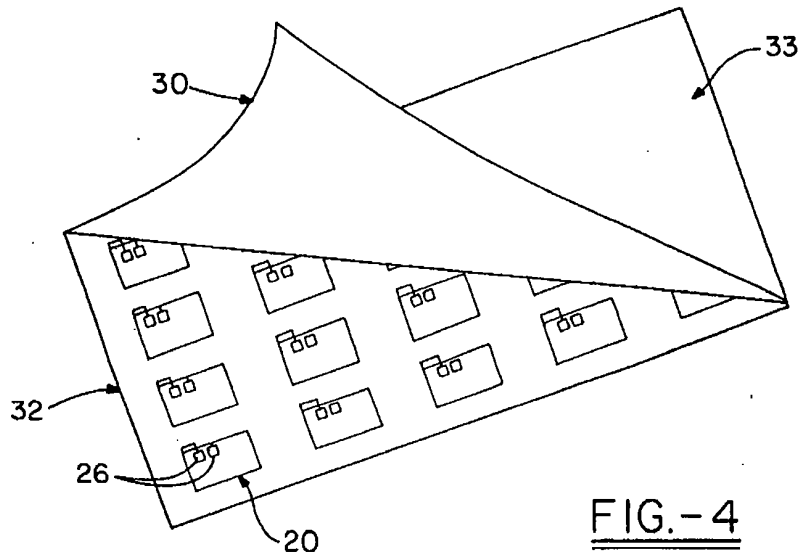
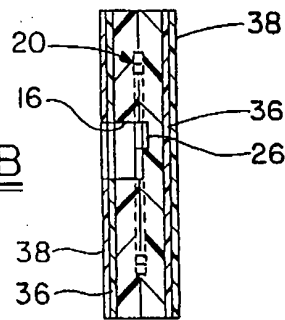


FIG.-4

PRINT OF DRAWINGS
AS ORIGINALLY FILED

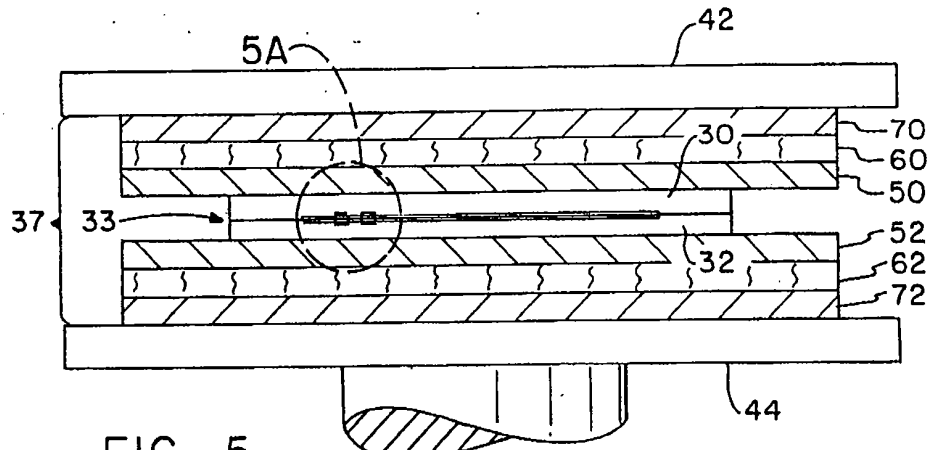


FIG. - 5

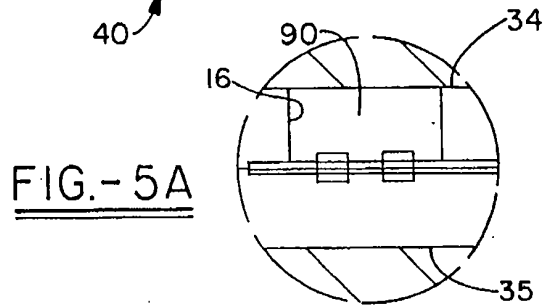


FIG. - 5A

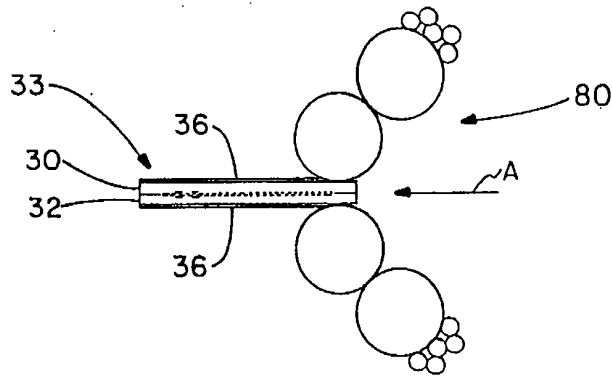


FIG. - 6

PRINT OF DRAWINGS
AS ORIGINALLY FILED

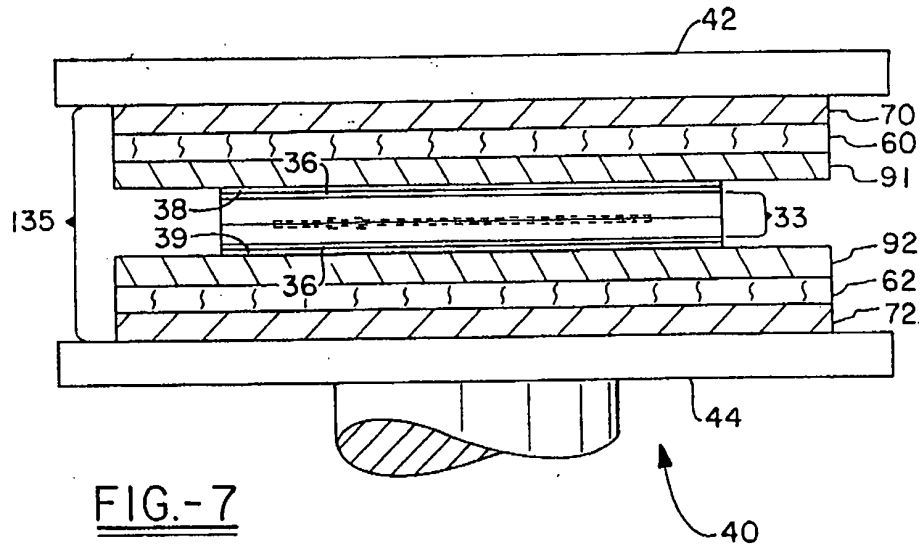
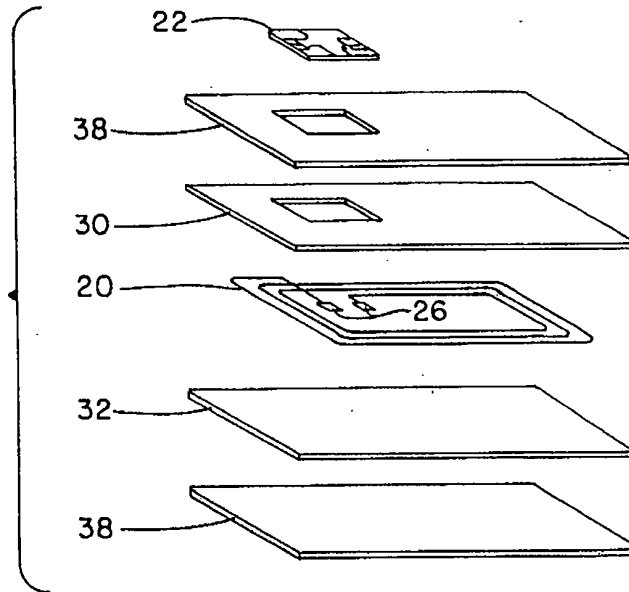


FIG. -8





UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO./TITLE
09/368,846	08/05/99	LEIGHTON	K 6014-2-CON
021324	0212/0831		
OLDHAM & OLDHAM CO TWIN OAKS ESTATE 1225 W MARKET STREET AKRON OH 44313			NOT ASSIGNED
DATE MAILED: 2876			

NOTICE TO FILE MISSING PARTS OF APPLICATION
Filing Date Granted

08/31/99

An Application Number and Filing Date have been assigned to this application. The items indicated below, however, are missing. Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a). If any of items 1 or 3 through 5 are indicated as missing, the **SURCHARGE set forth in 37 CFR 1.16(e)** of **\$65.00** for a small entity in compliance with 37 CFR 1.27, or **\$130.00** for a non-small entity, must also be timely submitted in reply to this NOTICE to avoid abandonment.

If all required items on this form are filed within the period set above, the total amount owed by applicant as a
☒ *small entity (statement filed)* ☐ *non-small entity is \$* 45.00

☐ 1. The statutory basic filing fee is:

- ☐ missing.
☐ insufficient.

Applicant must submit \$_____ to complete the basic filing fee and/or file a small entity statement claiming such status (37 CFR 1.27).

☐ 2. The following additional claims fees are due:

\$_____ for _____ total claims over 20.

\$_____ for _____ independent claims over 3.

\$_____ for multiple dependent claim surcharge.

Applicant must either submit the additional claim fees or cancel additional claims for which fees are due.

☒ 3. The oath or declaration:

☒ is missing or unsigned.

☐ does not cover the newly submitted items.

An oath or declaration in compliance with 37 CFR 1.63, including residence information and identifying the application by the above Application Number and Filing Date is required.

☐ 4. The signature(s) to the oath or declaration is/are by a person other than inventor or person qualified under 37 CFR 1.42, 1.43 or 1.47.

A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.

☐ 5. The signature of the following joint inventor(s) is missing from the oath or declaration:

An oath or declaration in compliance with 37 CFR 1.63 listing the names of all inventors and signed by the omitted inventor(s), identifying this application by the above Application Number and Filing Date, is required.

☐ 6. A \$50.00 processing fee is required since your check was returned without payment (37 CFR 1.21(m)).

☐ 7. Your filing receipt was mailed in error because your check was returned without payment.

☐ 8. The application was filed in a language other than English.

Applicant must file a verified English translation of the application, the \$130.00 set forth in 37 CFR 1.17(k), unless previously submitted, and a statement that the translation is accurate (37 CFR 1.52(d)).

☐ 9. OTHER:

Direct the reply and any questions about this notice to "Attention: Box Missing Parts."

A copy of this notice MUST be returned with the reply.

Customer Service Center
 Customer Service Center
 Initial Patent Examination Division (703) 308-1202



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO./TITLE
09/368,846	08/05/99	LEIGHTON	K 6014-2-CON

021324
OLDHAM & OLDHAM CO
TWIN OAKS ESTATE
1225 W MARKET STREET
AKRON OH 44313

0212/0831

NOT ASSIGNED

DATE MAILED: 2876

08/31/99

NOTICE TO FILE MISSING PARTS OF APPLICATION
Filing Date Granted

An Application Number and Filing Date have been assigned to this application. The items indicated below, however, are missing. Applicant is given TWO MONTHS FROM THE DATE OF THIS NOTICE within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a). If any of items 1 or 3 through 5 are indicated as missing, the SURCHARGE set forth in 37 CFR 1.16(e) of \$65.00 for a small entity in compliance with 37 CFR 1.27, or \$130.00 for a non-small entity, must also be timely submitted in reply to this NOTICE to avoid abandonment.

If all required items on this form are filed within the period set above, the total amount owed by applicant as a ☒ small entity (statement filed) ☐ non-small entity is \$ 65.00.

☒ 1. The statutory basic filing fee is:

- ☐ missing.
☒ insufficient.

Applicant must submit \$_____ to complete the basic filing fee and/or file a small entity statement claiming such status (37 CFR 1.27).

☒ 2. The following additional claims fees are due:

\$_____ for _____ total claims over 20.

\$_____ for _____ independent claims over 3.

\$_____ for multiple dependent claim surcharge.

Applicant must either submit the additional claim fees or cancel additional claims for which fees are due.

☒ 3. The oath or declaration:

☒ is missing or unsigned.

☐ does not cover the newly submitted items.

An oath or declaration in compliance with 37 CFR 1.63, including residence information and identifying the application by the above Application Number and Filing Date is required.

☐ 4. The signature(s) to the oath or declaration is/are by a person other than inventor or person qualified under 37 CFR 1.42, 1.43 or 1.47.

A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.

☐ 5. The signature of the following joint inventor(s) is missing from the oath or declaration:

An oath or declaration in compliance with 37 CFR 1.63 listing the names of all inventors and signed by the omitted inventor(s), identifying this application by the above Application Number and Filing Date, is required.

☐ 6. A \$50.00 processing fee is required since your check was returned without payment (37 CFR 1.21(m)).

☐ 7. Your filing receipt was mailed in error because your check was returned without payment.

☐ 8. The application was filed in a language other than English.

Applicant must file a verified English translation of the application, the \$130.00 set forth in 37 CFR 1.17(k), unless previously submitted, and a statement that the translation is accurate (37 CFR 1.52(d)).

☐ 9. OTHER:

Direct the reply and any questions about this notice to "Attention: Box Missing Parts."

A copy of this notice MUST be returned with the reply.

Arnette Reeves
Customer Service Center
Initial Patent Examination Division (703) 308-1202

Please type a plus sign (+) inside this box → ☒Approved for use through 09/30/2000, OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SECTOR #3

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	09/368,846
	Filing Date	August 5, 1999
	First Named Inventor	Keith R. Leighton
	Group Art Unit	2876
	Examiner Name	SHERR, D.
Total Number of Pages in This Submission	5	Attorney Docket Number 6014-2-CON

ENCLOSURES (check all that apply)		
<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input checked="" type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Small Entity Statement <input type="checkbox"/> Request for Refund	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Additional Enclosure(s) (please identify below): Declaration/Power of Attorney \$65.00 Surcharge RETURN CARD
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

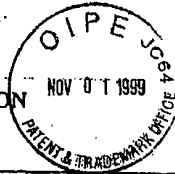
Firm or Individual name	Mark A. Watkins
Signature	<i>Mark A. Watkins</i>
Date	10/27/99

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on this date: 10/27/1999	
Typed or printed name	Mark A. Watkins
Signature	<i>Mark A. Watkins</i>
Date	10-27-99

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer: Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Practitioner's Docket No. 6014-2-CON



#3 PATENT

COMBINED DECLARATION AND POWER OF ATTORNEY

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL,
CONTINUATION, OR C-I-P)

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

This declaration is for a continuation application.

INVENTORSHIP IDENTIFICATION

My residence, post office address and citizenship are as stated below, next to my name. I believe that I am the original, first and sole inventor (*if only one name is listed below*) or an original, first and joint inventor (*if plural names are listed below*) of the subject matter that is claimed, and for which a patent is sought on the invention entitled:

TITLE OF INVENTION

Hot Lamination Process for the Manufacture of a Combination Contact/Contactless Smart Card and Product Resulting Therefrom

SPECIFICATION IDENTIFICATION

The specification is attached hereto.

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information, which is material to patentability as defined in 37, Code of Federal Regulations, § 1.56.

CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S)
(35 U.S.C. § 119(e))

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

PROVISIONAL APPLICATION NUMBER

60/005,685

60/024,255



FILING DATE

10/17/1995

10/21/1996

CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S)
UNDER 35 U.S.C. § 120

I hereby claim the benefit, under Title 35, United States Code, § 120, of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information that is material to patentability as defined in 37, Code of Federal Regulations, § 1.56 and that is material to the examination of this application, namely, information where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent, that occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 USC § 120:				
U.S. APPLICATIONS		STATUS		
U.S. APPLICATIONS	U.S. FILING DATE	Patented	Pending	Abandoned
1.0 /5,817,207	10/07/1996	X		
2.0 /08/918,582	08/19/1997		X	
PCT APPLICATION DESIGNATING THE U.S.				
PCT APPLICATION NO.	PCT FILING DATE	U.S. APPLICATION NOS. ASSIGNED (IF ANY)		

(Declaration and Power of Attorney—page 2 of 3)

POWER OF ATTORNEY

I hereby appoint the following practitioner(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

Mark A. Watkins

Registration Number 33,813

I hereby appoint the practitioner(s) associated with the Customer Number provided below to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

SEND CORRESPONDENCE TO

DIRECT TELEPHONE CALLS TO:

Mark A. Watkins
Oldham & Oldham Co., L.P.A.
1225 W. Market Street
Akron, OH 44313 USA



Mark A. Watkins
(330) 864-5550

Customer Number 021324

DECLARATION

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURE(S)

Keith R. Leighton
Inventor's signature

Date 10-19-99

Residence Lorain, OH

Post Office Address 2817 Fulmer Road
Lorain, OH 44053

A handwritten signature in cursive script that reads "Keith R. Leighton".

Country of Citizenship USA



Practitioner's Docket No. 6014-2-CON

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Leighton, Keith R.

Application No.: 09/368,846

Group No.: 2876

Filed: August 5, 1999

Examiner:

For: Hot Lamination Process for the Manufacture of a Combination Contact/Contactless Smart Card and Product Resulting Therefrom

Assistant Commissioner for Patents
Washington, D.C. 20231

PATENT

RECEIVED
APR 25 2000
TECHNOLOGY CENTER 2800

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT
WITHIN THREE MONTHS OF FILING OR
BEFORE MAILING OF FIRST OFFICE ACTION (37 C.F.R. 1.97(b))

IDENTIFICATION OF TIME OF FILING THE ACCOMPANYING
INFORMATION DISCLOSURE STATEMENT

The information disclosure statement submitted herewith is being filed within three months of the filing date of the application or date of entry into the national stage of an international application or before the mailing date of a first Office action on the merits, whichever event occurs last. 37 C.F.R. 1.97(b)

RECEIVED
NOV 01 1999

SIGNATURE OF PRACTITIONER

Reg. No. 33,813
Tel. No.: (330) 864-5555

Mark A. Watkins
Oldham & Oldham Co., L.P.A.
1225 W. Market Street

CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. 1.8(a))

I hereby certify that, on the date shown below, this correspondence is being:

MAILING

FACSIMILE

deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

transmitted by facsimile to the Patent and Trademark Office.

Date: 10-27-99

Signature

MARK A. WATKINS

(type or print name of person certifying)

(Transmittal of Information Disclosure Statement Within Three Months of Filing or Before Mailing of First Office Action)



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Leighton, Keith R. Examiner: not yet assigned

Serial No: 09/368,846 Art Unit: 2876

Filed: August 5, 1999 Date: October 27, 1999

For: HOT LAMINATION PROCESS FOR THE MANUFACTURE OF A COMBINATION CONTACT/CONTACTLESS SMART CARD AND PRODUCT RESULTING THEREFROM

RECEIVED

APR 25 2000

TECHNOLOGY CENTER 2800

Commissioner of Patents and Trademarks
Washington, D.C. 20231

RECEIVED

NOV 01 1999

INFORMATION DISCLOSURE STATEMENT
Under 37 CFR § 1.97

TECHNOLOGY CENTER 2800

This Information Disclosure Statement is filed within three months after the filing date of this application and is therefore timely. 37 CFR §1.97(b).

The filing of this Information Disclosure Statement shall not be construed as a representation that a search has been made (37 CFR §1.56(g)), an admission that the information cited is, or is considered to be, material to patentability or that no other material information exists.

The filing of this Information Disclosure Statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13, at 25.

This Information Disclosure Statement is made to comply with the duty of candor imposed on all individuals associated with the filing or prosecution of this application, as defined by 37 CFR §1.56(c).

A list of the patents and other cited references cited by the applicant are enclosed on two sheets of Form PTO-1449 which are attached and made a part hereof. Copies of the references are enclosed herein. The relevance of each cited reference is thought to have been sufficiently discussed in the prosecution of the parent applications and, therefore, has not

RECEIVED
APR 5 2000
MAIL ROOM
RECEIVED
MAY -3 2000
MAIL ROOM

2

been recited herein.

This Information Disclosure Statement is based on information contained in the undersigned attorney file as of the date of this statement and is inclusive of the best information known to the undersigned at that date.

The Examiner is kindly requested to consider the Information Disclosure Statement in addition to any references identified by the Examiner as a result of his independent search and examination.

Respectfully submitted,

OLDHAM & OLDHAM CO., LPA

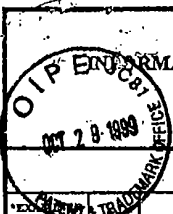


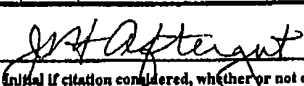





Mark A. Watkins
Registration 33,813

MAW/JDD/srm

Twin Oaks Estate
1225 West Market Street
Akron, OH 44313-7188
(330) 864-5550

Attorney Docket: 6014-2-CON

 <p style="margin: 0;">INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)</p>				Docket Number (Optional) 6014-2-CON		Application Number 09368846	
				Applicant(s) Keith R. Leighton			
				Filing Date		Group Art Unit	
				U.S. PATENT DOCUMENTS			
INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	AA	4,450,024	5/22/84	Haghiri-Tehrani et al.			
	AB	5,067,008	11/19/91	Yanaka et al.			
	AC	5,396,650	3/7/95	Terauchi			
	AD	5,208,450	5/4/93	Uenishi et al.			
	AE	4,980,802	12/25/90	Champagne et al.			
	AF	5,097,117	3/17/92	Champagne et al.			
	AG	5,438,750	8/8/95	Venambre			
	AH	5,567,362	10/22/96	Grun			
	AI	4,795,898	1/3/89	Bernstein et al.			
	AJ	4,701,236	10/20/87	Vieilledent			
	AK	4,792,843	12/20/88	Haghiri-Tehrani et al.			
FOREIGN PATENT DOCUMENTS							
REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES NO	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
EXAMINER 				DATE CONSIDERED 12-1-00			
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)				Docket Number (Optional) 6014-2-CON		Application Number 0936846	
				Applicant(s) Keith R. Leighton		Group Art Unit	
U.S. PATENT DOCUMENTS							
EXAMINER INITIALS	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AL	5,173,840	12/22/92	Kodai et al.			
	AM	5,272,596	12/21/93	Honore et al.			
	AN	5,412,192	5/2/95	Hoss			
	AO	5,268,699	12/7/93	Laute et al.			
	AP	5,809,633	9/22/98	Mundigleet al.			
	AQ	4,841,135	6/29/89	Hida et al.			
	AR	3,994,225	11/30/76	Sitzberger			
FOREIGN PATENT DOCUMENTS							
REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	YES	NO
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
EXAMINER: 							
DATE CONSIDERED 12-1-00							
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/368,846	08/05/99	LEIGHTON	K 6014-2-CON

021324
 OLDHAM & OLDHAM CO
 TWIN OAKS ESTATE
 1225 W MARKET STREET
 AKRON OH 44313

IM22/1206

EXAMINER

AFTERGLIT, J

ART UNIT

PAPER NUMBER

1733

DATE MAILED:

12/06/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)	
	09/368,846	LEIGHTON, KEITH R.	
	Examiner	Art Unit	
	Jeff H. Aftergut	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on ____.

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-24 is/are pending in the application.

4a) Of the above claim(s) 18-22 is/are withdrawn from consideration.

5) ☐ Claim(s) ____ is/are allowed.

6) ☒ Claim(s) 1-17, 23 and 24 is/are rejected.

7) ☐ Claim(s) ____ is/are objected to.

8) ☐ Claims ____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on ____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. ____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.

18) ☒ Interview Summary (PTO-413) Paper No(s). 4

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other:

Application/Control Number: 09/368,846
Art Unit: 1733

Page 2

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-19, and 22-24, drawn to a method of laminating a chip bearing card, classified in class 156, subclass 153.
- II. Claims 20 and 21, drawn to a laminated card, classified in class 235, subclass 488.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process such as one where the recess was formed in the substrate by etching chemically rather than mechanically milling.

Additionally, the chip could be embedded in a piece of plastic with a preformed recess therein and have a piece of plastic laminated there over in order to form the laminated card.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper. This application contains claims directed to the following patentably distinct species of the claimed invention: the species where the recess was

Application/Control Number: 09/368,846

Page 3

Art Unit: 1733

formed via a milling operation or the species where the recess was preformed and maintained with a spacer during the laminating operation.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. During a telephone conversation with Mark Watkins on 11-30-00 a provisional election was made with traverse to prosecute the invention of Group I, the species of milling out the recess for the contacts, claims 1-17, 23, and 24. Affirmation of this election must be made by

Application/Control Number: 09/368,846

Page 4

Art Unit: 1733

applicant in replying to this Office action. Claims 18- 22 have been withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-17, 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 12, the line ends with a ".", however the claim does not end here.

Applicant is advised that the claim should only have one period at the end of the claim. It is suggested that --- be changed to --,and,--.

Double Patenting

8. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

9. Claim 11 is rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of prior U.S. Patent No. 6,036,099. This is a double patenting rejection. All of the limitation of dependent claim 11 are claimed in independent claim 1 of the prior application.

Application/Control Number: 09/368,846
 Art Unit: 1733

Page 5

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1-17, 23, and 24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,036,099.

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims presented herein are generic to the operation as recited in the earlier patent and therefore the subject matter of the same are covered by the earlier claimed patent, see *In re Goodman*, 29 USPQ2d 2010.

12. Claims 1-17, 23 and 24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. Patent No. 5,817,207 in view of Templeton, Jr. et al.

The claimed invention in U.S. '207 is essentially the same invention as recited herein, except that the claims failed to recite that one skilled in the art would have milled the assembly in order to form contacts with the electronic component disposed within the card. However, as envisioned by Templeton, Jr. et al such milling to make electrical contact in a card with an embedded electronic component therein was known. Templeton, et al suggested that one skilled in the art would have known that subsequent to lamination of a circuit component within a card

Application/Control Number: 09/368,846

Page 6

Art Unit: 1733

one would have milled the same. More specifically, an inductive coil 201 was formed upon a plastic substrate 202 of PVC for example. Onto the substrate 202 one laminated a second substrate 203 which covered and encapsulated the coil 201. The reference taught that subsequent to the lamination operation one milled out the contact holes 203b through the substrate in locations where the contact pads 201a of the inductive coil are in order to facilitate electrical contact with the inductive coil which was embedded within the plastic sheets. See column 7, lines 6-17. Because it would have been desirable to make contact with an embedded coil in a smart card which was a contactless card as envisioned by Templeton, Jr. et al, it would have been obvious to one of ordinary skill in the art of manufacturing a smart card to incorporate a milling step after card formation in the operations of US Patent '207 in the formation of a contactless smart card.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 1, 4-10, and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 6-176214 in view of UK 2,279,610 and Templeton, Jr. et al optionally further taken with UK 2,225,283.

Japanese Patent '214 taught a process for forming a smart card which included the steps of laminating with heat and pressure an assembly which included an IC chip 11 and a thin coil 12

JP
214

Application/Control Number: 09/368,846
Art Unit: 1733

Page 7

(an antennae). The IC chip 11 and antennae 12 were disposed unsupported between plastic films 14. On either side of plastic films 14 were additional plastic films 15. The assembly was disposed in a press and heat and pressure were applied in order to laminate the layers together to form the smart card. The reference to Japanese Patent '214 failed to teach that the heat and pressure laminating operation included a cooling operation while the press remained under pressure. Additionally, there is no mention of milling the laminated card in order to gain access to contacts of the chip and/or antennae for purposes of making physical contact with the same.

However, in the art of making a laminated smart card, it was known as evidenced by UK '610 that one skilled in the art when laminating the same together would not have applied high heat and pressure and then removed the same in the lamination operation for processing under such extreme conditions would lead to damage of the chip and/or antennae in the laminate. The reference to UK '610 suggested that one skilled in the art would have interposed a printed circuit 11 with reinforced elements 19 between two outer sheets 37 and 38 of thermoplastic in the PVC family with interposed polyester layers coated with thermally activated catalyst adhesive and the assembly was disposed between pressing plates. The assembly was heated and then pressure applied to the same in order to encapsulate the electrical components of the card. Subsequent to the application of this heat and pressure, the pressure was maintained while the card was allowed to cool in the press, see page 11, line 16-page 12, line 12. The reference made clear that in order to avoid damaging the integrated circuit which was being encapsulated that one would have heated the assembly, then applied heat and pressure to the assembly in the press and then cooled the assembly while pressure was maintained. Clearly, one viewing the same would have understood that heat and pressure as well as cooling under pressure would have been performed

Application/Control Number: 09/368,846

Page 8

Art Unit: 1733

when laminating the card with the integrated circuit therein. Note that Japanese Patent '214 performed the lamination operation in a heated press. The combination fails to suggest that one would have milled out openings in the card after formation in order to provide open contacts in the card.

However, the reference to Templeton, et al suggested that one skilled in the art would have known that subsequent to lamination of a circuit component within a card one would have milled the same. More specifically, an inductive coil 201 was formed upon a plastic substrate 202 of PVC for example. Onto the substrate 202 one laminated a second substrate 203 which covered and encapsulated the coil 201. The reference taught that subsequent to the lamination operation one milled out the contact holes 203b through the substrate in locations where the contact pads 201a of the inductive coil are in order to facilitate electrical contact with the inductive coil which was embedded within the plastic sheets. See column 7, lines 6-17. Because it would have been desirable to make contact with an embedded coil in a smart card which was a contactless card as envisioned by Templeton, Jr. et al, it would have been obvious to one of ordinary skill in the art of manufacturing a smart card to incorporate a milling step after card formation in the operations of Japanese Patent 6-176214 wherein the pressing operation was performed in a heated press where the pressure was maintained during the cooling operation as suggested by UK 2,279,610.

With respect to claims 4-5, the references as set forth above suggested the use of PVC and/or polyester materials and one skilled in the art would have been determined the suitable thickness for the material through routine experimentation. Regarding claims 6-7 and 9-10, note that UK '610 suggested that one skilled in the art would have increased the pressure after

Application/Control Number: 09/368,846

Page 9

Art Unit: 1733

increasing the temperature (ramped the same up). One skilled in the art would have optimized the specific pressure used in order to achieve a good bond without disrupting the ability of the circuit to operate properly. Regarding claim 15, note that Templeton taught one would have provided an electrical contact in the cavity formed by milling. Regarding claims 16 and 17, one skilled in the art would have understood what kind of chips would have been useful for the manufacture of the cards. Regarding claims 8 and 14, the references as set forth above suggested the use of multiple films over the chip, for example Japanese Patent '214 suggested the use of multiple films 14 and 15 over the assembly. The specific pressures and temperatures employed in the operation would have been determined through routine experimentation.

While it is believed that the reference to UK '610 suggested that one would have ramped up the pressure during the laminating operation, to further evidence that the highest amount of pressure would have been applied when the assembly was cooled, the reference to UK '283 is cited. UK '283 is manufacturing an integrated circuit card where the assembled layers (which included thin plastic layers which had printing on the layers as well as in integrated circuit therein) were laminated together in a press. The reference taught that the press would have been preheated, the pressure applied and then the assembly removed or the assembly would have been preheated and the pressure applied in steps with the highest pressure applied while the assembly was being cooled in the press, see page 11, lines 3-13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a pressing operation in the manufacture of an integrated circuit card wherein the pressure applied would have been the highest when the card was being cooled in the press as suggested by UK 2,225,283 wherein the laminated card was formed by laminating with heat and pressure in a press as suggested by

Application/Control Number: 09/368,846
Art Unit: 1733

Page 10

Japanese Patent 6-176214 and UK 2,279,610 wherein after lamination the card would have been milled in order to expose the contact pads of the electronic component within the card as suggested by Templeton, Jr. et al.

For a discussion of the dependent claims, see above.

15. Claims 2, 3, 11-13, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as set forth above in paragraph 14 further taken with UK 2,294,899.

The references as set forth above in paragraph 14 suggested the overall operation, they failed to suggest that one would have provided the platens with a matte surface thereon such that the finished exterior surfaces of the card had a matte finish. Additionally, the references failed to mention a printing operation used in manufacturing the card (it should be noted that UK '283 suggested that layers 2 and 6 would have been provided with printing thereon, see page 5, lines 3-5 of the UK document). However, in the art of manufacturing a smart card where an integrated circuit was disposed within the card, it was known at the time the invention was made to provide the exterior of the card with a matte finish where the same was provided by employed pressing plates which had a matte finish thereon in order to reduce the spectral reflection as suggested by UK '899, see page 4, lines 4-6. Additionally, in manufacturing such smart cards, it was well known at the time the invention was made to provide printed information upon the same where the printed information would have been provided upon the layers prior to the pressing operation as in printed information 8 and additional information would have been printed upon the cards exterior after formation as in image 10. It would have been within the purview of the ordinary artisan to select suitable printing techniques from those which were readily available to the artisan and the specified printing techniques claimed are taken as conventional in the art of

Application/Control Number: 09/368,846

Page 11

Art Unit: 1733


making smart cards. It would have been obvious to one of ordinary skill in the art of laminating to form a smart card to provide the card with a matte finish (in order to reduce reflection) as well as to provide the card with printing thereon in order to facilitate a useful card as suggested by UK 2,294,899 in the manufacture of a smart card as set forth above in paragraph 14.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 703-308-2069. The examiner can normally be reached on Monday-Friday 6:30-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W. Ball can be reached on 703-308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3599 for regular communications and 703-305-7718 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
December 1, 2000

Notice of References Cited				Application/Control No.		Applicant(s)/Patent Under Reexamination			
				09/368,846		LEIGHTON, KEITH R.			
				Examiner Jeff H. Aftergut		Art Unit 1733			
Page 1 of 1									
U.S. PATENT DOCUMENTS									
*		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	DOCUMENT SOURCE **		
							APS	OTHER	
<input type="checkbox"/>	A	5,817,207	Oct. 1998	Leighton	156	298	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	B	6,036,099	Mar. 2000	Leighton	235	488	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	C	5,519,201	May. 1996	Templeton, Jr. et al	235	492	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	D						<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	E						<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	F						<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	G						<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	H						<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	I						<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	J						<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	K						<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	L						<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	M						<input type="checkbox"/>	<input type="checkbox"/>	
FOREIGN PATENT DOCUMENTS									
*		DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUBCLASS	DOCUMENT SOURCE **	
								APS	OTHER
<input type="checkbox"/>	N	2,279,610	Jan. 1995	UK	GEC Avery Lmtd.	--	--	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	O	6-176214	Jun. 1994	Japan	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	P	2,225,283	May. 1990	UK	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	Q	2,294,899	May. 1996	UK	--	--	--	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	R							<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	S							<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	T							<input type="checkbox"/>	<input type="checkbox"/>
NON-PATENT DOCUMENTS									
*		DOCUMENT (Including Author, Title Date, Source, and Pertinent Pages)						DOCUMENT SOURCE **	
								APS	OTHER
<input type="checkbox"/>	U							<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	V							<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	W							<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	X							<input type="checkbox"/>	<input type="checkbox"/>

*A copy of this reference is not being furnished with this Office action. (See Manual of Patent Examining Procedure, Section 707.05(e).)

**APS encompasses any electronic search i.e. text, image, and Commercial Databases.

U.S. Patent and Trademark Office
PTO-892 (Rev. 03-98)

Notice of References Cited

Part of Paper No. 5



UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/368,846	08/05/99	LEIGHTON	K 6014-2-CON

021324
 OLDHAM & OLDHAM CO
 TWIN OAKS ESTATE
 1225 W MARKET STREET
 AKRON OH 44313

IM52/0720

EXAMINER

AFTERGUT, J
 ART UNIT PAPER NUMBER

1733
 DATE MAILED:

07/20/01

Please find below and/or attached an Office communication concerning this application or proceeding.

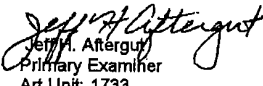
Commissioner of Patents and Trademarks

Notice of Abandonment	Application No.		Applicant(s)	
	09/368,846		LEIGHTON, KEITH R.	
	Examiner		Art Unit	
	Jeff H. Aftergut		1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on 06 December 2000.
 - (a) ☐ A reply was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply (including a total extension of time of _____ month(s)) which expired on _____.
 - (b) ☐ A proposed reply was received on _____, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection. (A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
 - (c) ☒ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
 - (a) ☐ The issue fee and publication fee, if applicable, was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance.
 - (b) ☐ The submitted fee of \$_____ is insufficient. A balance of \$_____ is due.
The issue fee required by 37 CFR 1.18 is \$_____. The publication fee, if required by 37 CFR 1.18(d), is \$_____.
 - (c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file new formal drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
 - (a) ☐ Proposed new formal drawings were received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply.
 - (b) ☐ The proposed new formal drawings filed on _____ are not acceptable and the period for reply has expired.
 - (c) ☐ No proposed new formal drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☐ The decision by the Board of Patent Appeals and Interference rendered on _____ and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☐ The reason(s) below:


 Jeff H. Aftergut
 Primary Examiner
 Art Unit: 1733



COPY OF PAPERS
ORIGINALLY FILED

7

Docket No. 6014-2-CON

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of: Keith Leighton Group Art Unit: 1733
Serial No.: 09/368,846 Examiner: J. Aftergut
Filed: August 5, 1999 Date: February 15, 2002
For: Hot Lamination Process for the Manufacture of a Combination
Contact/Contactless Smart Card and Product Resulting Therefrom

PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED
UNINTENTIONALLY UNDER 37 C.F.R. §1.137(b)

Attention: Office of Petitions
Assistant Commissioner for Patents
Box DAC
Washington, D.C. 20231

RECEIVED
MAR 07 2002
OFFICE OF PETITIONS
DEPUTY A/C PATENTS

Sir:

The above-identified application became abandoned for failure to file a timely reply to the final Office Action mailed on December 6, 2000, which set a three month period for reply. The abandonment date of this application is March 6, 2001.

APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION.

1. Petition Fee

Enclosed is a check for the small entity fee \$640.00 (37 C.F.R. §1.17(m)).

2. Reply and/or fee.

Enclosed herewith is an amendment and response to the Office Action mailed.

Enclosed is a check in the amount of \$45.00 for additional claims.

03/06/2002 STEFFERA 00000089 09368846

01 FC:241

640.00 OP

Docket No. 6014-2-CON
Serial No. 09/368,846

February 15, 2002
Page 2

3. Terminal Disclaimer with disclaimer fee.

Since this application was filed on or after June 8, 1995, no terminal disclaimer is required.


4. Statement: The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 C.F.R. § 1.137(b) was unintentional.

5. Additional Fees

Please charge Account 15-0450 for any additional fees may be required by the filing of these papers.

Respectfully submitted,

Hahn Loeser & Parks LLP


Michael H. Minns
Reg. No. 31,985

Date: February 15, 2002


Hahn Loeser + Parks LLP
Twin Oaks Estate
1225 West Market Street
Akron, Ohio 44313-7188
(330) 864-5550

Enclosures: Amendment
Reply
Terminal Disclaimer
Return Postcard

CERTIFICATION UNDER 37 C.F.R. § 1.8(a)

I hereby certify that, on the date shown below, this correspondence is being deposited with the United States Postal Service in an envelope addressed to the Assistant Commissioner of Patents, Washington D.C. 20231 with sufficient postage as first class mail.

Date: February 15, 2002


Signature
Michael H. Minns
Type or print name of person certifying



COPY OF PAPERS
ORIGINALLY FILED

Docket No.: 6014-2-CON

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#8/a Ude

4/10/02

In re patent application of: Keith Leighton Group Art Unit: 1733
Serial No.: 09/368,846 Examiner: J. Aftergut
Filed: August 5, 1999 Date: February 13, 2002
For: Hot Lamination Process for the Manufacture of a Combination
Contact /Contactless Smart Card and Product Resulting Therefrom

AMENDMENT AND REQUEST FOR RECONSIDERATION
UNDER 37 C.F.R. §1.111

Assistant Commissioner For Patents
Washington, D.C. 20231

Sir:

In response to the Official Action dated, please amend the above-identified application as follows:

IN THE SPECIFICATION:

On page 1, replace the paragraph before "Field of the Invention", with the following paragraph:

This application is a continuation of copending application 08/918,582, filed August 19, 1997, now U.S. Patent No. 6,036,099, which claimed the benefit of provisional application serial no. 60/024,255, filed August 21, 1996; a continuation-in-part of copending application 08/727,789 filed October 7, 1996, now U.S. Patent No. 5,817,207, which claimed the benefit of provisional application serial no. 60/005,685, filed on October 17, 1995.

03/06/2002 STEFFERA 00000089 09368846

03 FC:203

45.00 DP

A

Docket No. 6014-2-CON
Serial No. 09/368,846

On page 4, replace the first paragraph after "Summary of the Invention" with the following:

The present invention is therefore directed to a hot lamination method for the manufacture of a plastic card having at least one electronic element embedded therein as well as at least one electronic element with an exposed contact surface and to such plastic cards. The card has an overall thickness in the range of 0.028 inches to 0.032 inches and comprises a plastic core having at least one electronic element embedded therein with at least one of the upper and lower surfaces of the core comprising a coating printed or otherwise applied thereon. A portion of the ~~card~~card's outer surface exposes a contact surface electronic element operatively connected to the ~~card~~card's internal electronics. An overlamine film is preferably provided over the coated surface of the core and the resulting card has a variation in thickness across the surfaces thereof of no greater than approximately 0.0005 inches.

IN THE CLAIMS:

1. (Amended) A process for incorporating at least one electronic element in the manufacture of a plastic card, comprising the steps of:

- (a) providing first and second plastic core sheets;
- (b) positioning said at least one electronic element in the absence of a non-electronic carrier directly between said first and second plastic core sheets to form a core, said plastic core sheets defining a pair of inner and outer surfaces of said core;
- (c) positioning said core in a laminator apparatus, and subjecting said core to a heat and pressure cycle, said heat and pressure cycle comprising the steps of:
 - (i) heating said core for a first period of time;
 - (ii) applying a first pressure to said core for a second period of time such that said at least one electronic element is encapsulated by said core;
 - (iii) cooling said core while applying a second pressure to said core; and

Docket No. 6014-2-CON
Serial No. 09/368,846

(d) milling a region of said core to a controlled depth so as to form a cavity which exposes at least one contact pad of said electronic element.

Cancel claim 11.

Add new claims 25 through 30.

25. (New) The process according to claim 1, wherein the pressure on said core is step (c)(i) is less than 10 p.s.i.

26. (New) The process according to claim 1, wherein said core is heated in step (c)(ii).

27. (New) A process for incorporating at least one electronic element in the manufacture of a plastic card, comprising the steps of:

(a) providing first and second plastic core sheets;

(b) positioning said at least one electronic element in the absence of a non-electronic carrier directly between said first and second plastic core sheets to form a core, said plastic core sheets defining a pair of inner and outer surfaces of said core;

(c) positioning said core in a laminator apparatus, and subjecting said core to a heat and pressure cycle, said heat and pressure cycle comprising the steps of:

(i) heating said core for a first period of time;

(ii) applying a first pressure to said core for a second period of time such that said at least one electronic element is encapsulated by said core;

(iii) cooling said core while applying a second pressure to said core.

28. (New) The process according to claim 27, further comprising:
forming a cavity in said core.

Docket No. 6014-2-CON
Serial No. 09/368,846

29. (New) The process according to claim 28, wherein the step of forming a cavity in said core comprises:

after step (c), milling a region of said core to a controlled depth so as to form a cavity which exposes at least one contact pad of said electronic element.

30. (New) The process according to claim 28, wherein the step of forming a cavity in said core comprises:

at least one core sheet having a cavity formed therein; and:

before step (c) inserting a spacer into said cavity, said spacer substantially filling said cavity and covering said at least one electronic subcomponent; and

after step (c) removing said spacer for the cavity of said core.

Docket No. 6014-2-CON
Serial No. 09/368,846

REMARKS

Claims 1 through 10 and 12 through 30 are in the case. Claim 1 is amended by this amendment. Claim 11 is canceled by this amendment. Claims 25 through 30 are added by this amendment.

Attached is a clean version of the changes made to the specification and claims by the current amendment. The attached pages are captioned "**Clean Version Incorporating Changes Made**"

Accompanying this amendment are a Petition for Revival of an Application for Patent Abandoned Unintentionally and a Terminal Disclaimer to Obviate a Double Patenting Rejection.

The Examiner required restriction to one of the following inventions under 35 U.S.C. § 121:

- I. Claims 1-19, and 22-24, drawn to a method of laminating a chip bearing card, classified in class 156, subclass 153.
- II. Claims 20 and 21, drawn to a laminated card, classified in class 235, subclass 488.

The Examiner further required election of a single disclosed species between the species where the recess was formed via a milling operation and the species where the recess was preformed and maintained with a spaced during the laminating operation.

Applicant affirms the telephone election of November 30, 2000 of Group I and the species of milling out the recess for the contacts, claims 1 through 17, 23 and 24.

New claims 25 and 26 are dependent from claim 1, and therefore read on the species of milling out the recess. New claims 27 and 28 are generic. New claim 29 reads on the species of milling out the recess and new claim 30 reads on the species of preforming the cavity.

Claims 1 through 17, 23 and 24 are rejected under 35 U.S.C. §112, second paragraph. Specifically, claim 1, line 12 ends with a ".", but the claim does not end there. Claim 1 has been amended as suggested.

Docket No. 6014-2-CON
Serial No. 09/368,846

Claim 11 is rejected under 35 U.S.C. §101 as claiming the same invention as that of claim 1 of prior U.S. Patent no. 6,036,099. Claim 11 has been cancelled.

Claims 1 through 17, 23 and 24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 16 of U.S. Patent no. 6,036,099. Claims 1 through 17, 23 and 24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 17 of U.S. Patent No. 5,817,207 in view of Templeton, Jr. et al.

Enclosed is a terminal disclaimer disclaiming the term of any patent that issues from this application that extends beyond the term of U.S. Patent No. 6,036,099 or U.S. Patent No. 5,817,207. Applicant submits that this terminal disclaimer obviates this rejection.

Claims 1, 4 through 10 and 14 through 17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent 6-176214 in view of UK 2,279,610 and Templeton, Jr. et al optionally further taken with UK 2,225,283. Claims 2, 3, 11 through 13, 23 and 24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent 6-176214 in view of UK 2,279,610 and Templeton, Jr. et al optionally further taken with UK 2,225,283, and further taken with UK 2,294,899.

The specification has been amended to claim the benefit of provisional applications serial nos. 60/024,255, filed August 21, 1996 and 60/005,685, filed on October 17, 1995. The January 11, 1995 publication date of UK 2,279,610 is less than one year before the October 17, 1995 filing date of provisional application 60/005,685. Therefore, UK 2,279,601 is not prior art to the present application.

Support for claims 1, 4 through 10, 14 through 17 and new claim 27, relative to the disclosure of UK 2,279,601 can be found on page 11 of provisional application serial no. 60/005,685.

With respect to UK 2,225,283, the reference does not disclose or suggest placing the assembly into the press and then heating the press and assembly under minimal pressure as does Applicant's invention. The '283 reference specifically states that the press is heated first and then the assembly is inserted into the press. Further, the

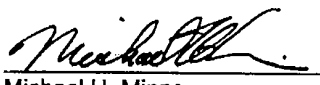
Docket No. 6014-2-CON
Serial No. 09/368,846

'283 reference does not disclose or suggest a further increase in the pressure while cooling the assembly. The '283 reference specifically states that the laminate is cooled with the pressure *maintained* at its highest value.

Generic claim 27 is also patentable over the prior art for the same reasons as stated above for claim 1. Since a generic claim is allowable, applicant respectfully that the restriction be withdrawn and claims 1 through 10 and 12 through 30 be allowed.

Respectfully submitted,
Hahn Loeser & Parks LLP

Date February 15, 2002


Michael H. Minns
Reg. No. 31,985

Hahn Loeser + Parks LLP
1225 West Market Street
Akron, Ohio 44313
(330) 864-5550

Docket No. 6014-2-CON
Serial No. 09/368,846

Clean Version Incorporating Changes Made

IN THE SPECIFICATION:

On page 1, replace the paragraph before "Field of the Invention", with the following paragraph:

A1
This application is a continuation of copending application 08/918,582, filed August 19, 1997, now U.S. Patent No. 6,036,099, which claimed the benefit of provisional application serial no. 60/024,255, filed August 21, 1996; a continuation-in-part of copending application 08/727,789 filed October 7, 1996, now U.S. Patent No. 5,817,207, which claimed the benefit of provisional application serial no. 60/005,685, filed on October 17, 1995.

On page 4, replace the first paragraph after "Summary of the Invention" with the following:

A2
The present invention is therefore directed to a hot lamination method for the manufacture of a plastic card having at least one electronic element embedded therein as well as at least one electronic element with an exposed contact surface and to such plastic cards. The card has an overall thickness in the range of 0.028 inches to 0.032 inches and comprises a plastic core having at least one electronic element embedded therein with at least one of the upper and lower surfaces of the core comprising a coating printed or otherwise applied thereon. A portion of the card's outer surface exposes a contact surface electronic element operatively connected to the card's internal electronics. An overlamine film is preferably provided over the coated surface of the core and the resulting card has a variation in thickness across the surfaces thereof of no greater than approximately 0.0005 inches.

Docket No. 6014-2-CON
Serial No. 09/368,846

IN THE CLAIMS:

~~SUB B1~~
1. (Amended) A process for incorporating at least one electronic element in the manufacture of a plastic card, comprising the steps of:

(a) providing first and second plastic core sheets;

(b) positioning said at least one electronic element in the absence of a non-electronic carrier directly between said first and second plastic core sheets to form a core, said plastic core sheets defining a pair of inner and outer surfaces of said core;

(c) positioning said core in a laminator apparatus, and subjecting said core to a heat and pressure cycle, said heat and pressure cycle comprising the steps of:

(i) heating said core for a first period of time;

(ii) applying a first pressure to said core for a second period of time such that said at least one electronic element is encapsulated by said core;

(iii) cooling said core while applying a second pressure to said core; and

(d) milling a region of said core to a controlled depth so as to form a cavity which exposes at least one contact pad of said electronic element.

Cancel claim 11.

Add new claims 25 through 30.

~~SUB B3~~
25. (New) The process according to claim 1, wherein the pressure on said core is step (c)(i) is less than 10 p.s.i.

19
26. (New) The process according to claim 1, wherein said core is heated in step (c)(ii).

~~SUB B4~~
27. (New) A process for incorporating at least one electronic element in the manufacture of a plastic card, comprising the steps of:

(a) providing first and second plastic core sheets;

Docket No. 6014-2-CON
Serial No. 09/368,846

(b) positioning said at least one electronic element in the absence of a non-electronic carrier directly between said first and second plastic core sheets to form a core, said plastic core sheets defining a pair of inner and outer surfaces of said core;

(c) positioning said core in a laminator apparatus, and subjecting said core to a heat and pressure cycle, said heat and pressure cycle comprising the steps of:

- (i) heating said core for a first period of time;
- (ii) applying a first pressure to said core for a second period of time such that said at least one electronic element is encapsulated by said core;
- (iii) cooling said core while applying a second pressure to said core.

28. (New) The process according to claim 27, further comprising:
forming a cavity in said core.

29. (New) The process according to claim 28, wherein the step of forming a cavity in said core comprises:

after step (c), milling a region of said core to a controlled depth so as to form a cavity which exposes at least one contact pad of said electronic element.

30. (New) The process according to claim 28, wherein the step of forming a cavity in said core comprises:

at least one core sheet having a cavity formed therein; and:

before step (c) inserting a spacer into said cavity, said spacer substantially filling said cavity and covering said at least one electronic subcomponent; and

after step (c) removing said spacer for the cavity of said core.